REMARKS

Claims 7-12 are pending in the present application. Claim 7 was amended in this response. No new matter has been introduced as a result of the amendments.

Claims 7-10 and 12 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over *Hamada* (EP 0895437 A) and further in view of *Sheperd* et al., (EP 0399612 A2) and *Hämäläinen* (WO 9859441). The Applicants respectfully traverse this rejection based on the following comments.

The cited art, alone or in combination, fails to teach the element of "changing, upon a disturbance of the duplex radio link, only one of the disturbed first or second physical radio channel, wherein the undisturbed first or second physical radio channel is retained" as recited in claim 7. The Office Action previously recognized that *Hamada* is silent on teaching the claimed feature of changing, upon a disturbance of the duplex radio link, only the disturbed one of the first physical radio channel and the second physical radio channel wherein the undisturbed one of the first physical radio channel and the second physical radio channel is retained.

Hamada specifically teaches using two out of four duplex communications slots (i.e., a second duplex communications slot) (R2, T2) and a fourth duplex communication slot (R4, T4)) that perform communication of a radio communication terminal where it is assumed that trouble has occurred in one of the two duplex communication slots and errors are repeatedly detected more than a predetermined number of times ([0033, 0036]). The teachings of *Hamada* discloses two pairs of communication slots (e.g., slots R2, T2 or slots R4, T4) where an undisturbed pair of communication slots out of the two pairs of slots is retained and the other pair is disturbed. The two disturbed communications slots out of the four communication slots, i.e. the fourth communications slots (T4, R4), are changed, wherein the undisturbed two communications slots out of the four communications slots, i.e. the second communication slots (T2, R2), are retained and therefore, since the fourth communications slots (T4, R4) are disturbed, <u>both</u> the first physical radio channel (T4) and the second physical radio channel (R4) of the fourth communication slots are disturbed (see figures 6, 12 and 17 of *Hamada*).

In contrast, the presently claimed features of claim 7 define a method where only one of the two physical radio channels, the first physical radio channel and the second physical radio channel, is disturbed. Unlike the teaching of *Hamada*, the present claims do not utilize two of

four duplex communication slots performing communication of a radio communication terminal, but use only one duplex communication slot for the communication in the mobile radio communication system.

Furthermore, there is no teaching, suggestion or motivation to combine *Hamada* with either *Sheperd* or *Hämäläinen* in the manner suggested in the Office Action. In particular, although *Sheperd* et al. teaches reassignment of a single duplex channel/slot and *Hämäläinen* teaches the transmission/reception in different TDMA frames, these teachings nonetheless do not suggest to one of ordinary skill in the art how channel reassignment can be achieved in the case where only one physical radio channel of the two physical radio channels of a duplex communication slot/channel is disturbed.

In particular, *Sheperd* does not teach reassignment of a single duplex channel/slot in opposite directions due to disturbance of one channel of a duplex link. In the passage cited in the Office Action (col. 6, line 9 to col. 7, line 14), Sheperd teaches that, when data in one direction is absent or padded, that specific channel is *released* and reallocated to the reverse transmitting direction (col. 6, lines 9-22). Sheperd also teaches that each duplex channel consists of a pair of physical channels (col. 6, lines 22-28; claim 1). Thus, when two or more duplex voice channels are assigned to a transaction (thus using 4 physical channels), one of the non-transmitting channels are retained for signaling, while the balance of signals are reversed for unidirectional signaling (col. 6, lines 32-37; claim 10). Sheperd relies on the reversal of channels during the course of error detection, while *Hamada* switches both the receiving and transmission channels of a duplex channel, to change only one channel when a disturbance occurs in one of the channels. As such, there is no teaching or motivation to combine the references, as they teach away from each other, and further rely on different modes of operation.

Additionally, *Hämäläinen* teaches the allocation of additional timeslots in separate TDMA frames where a greater number of timeslots can be allocated for the downlink frames in order to improve efficiency of radio resource allocation and not due to channel disturbance. Thus, even if one of ordinary skill in the art were to utilize the teachings of *Hämäläinen* with *Hamada*, this would not achieve the claimed features of claim 7 since *Hämäläinen* is silent about what to do in the case of a disturbance and thus, one is left with the teaching of changing both the receive and transmit channels of *Hamada*, even though the capacity of each channel may be

different in accordance with the teachings of *Hämäläinen*. Accordingly, the Applicants respectfully submit that one of ordinary skill in the art would not be motivated or receive teaching to arrive at the teachings of claim 7 given the cited prior art. Accordingly, the Applicants respectfully request reconsideration and withdrawal of this rejection.

With respect to dependent claims 8-10 and 12, these claims are believed to be allowable on their merits and also due to their dependency on independent claim 7.

Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Hamada* in view of *Sheperd* and *Hämäläinen* and further in view of *Gitlin et al.*, (U.S. Patent No. 6,018,528). The Applicants respectfully traverse this rejection and submit that this claim is also allowable on its merits and at least due to its dependency on independent claim 7.

In light of the foregoing, the Applicants respectfully submit that the application is in condition for allowance and request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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